



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

NOV 23 2015

OFFICE OF THE
REGIONAL ADMINISTRATOR

Ms. Amy Blair
Kansas City District
U.S. Army Corps of Engineers
608 E. 12th Street, Room 529
Kansas City, Missouri 64016

Dear Ms. Blair:

The U.S. Environmental Protection Agency has reviewed the U.S. Army Corps of Engineers, Kansas City District's Draft Environmental Impact Statement for Next NGA West Campus in the Greater St. Louis Metropolitan Area. Our review is provided pursuant to the National Environmental Policy Act 42 U.S.C. 4231, Council on Environmental Quality regulations 40 CFR Parts 1500-1508, and Section 309 of the Clean Air Act. The Draft GEIS, Supplement 51, was assigned the CEQ number 20150287.

The Corps is proposing to construct a new facility for the NGA West Campus in order to replace mission critical facilities at the current St. Louis NGA facility, which the DEIS indicates have exceeded their service life and can no longer support the technology changes required for the NGA Mission. The Kansas City District of the Corps developed the DEIS, with NGA being the proponent of this action and the U.S. Air Force being a cooperating agency. The DEIS analyzes the potential environmental impacts associated with siting, constructing, and operating the Next NGA West Campus in the St. Louis, Missouri metropolitan area. In addition to the No Action alternative, four alternative locations for the Next NGA West Campus are under review, including the Fenton Site (St. Louis County, MO), Mehlville Site (St. Louis County, MO), St. Louis City Site (City of St. Louis, MO) and St. Clair County Site (St. Clair County, Illinois).

In general, the rating of an EIS is typically based on the lead agency's preferred alternative. The Corps has not identified a preferred alternative in their DEIS and as such, individual ratings for each alternative can be made under this NEPA review. However, EPA has rated the each of the alternatives and overall DEIS the same due to the need to have more information to better assess potential environmental impacts. We have rated the Draft EIS and four action alternatives EC-2 (Environmental Concerns/Insufficient Information). This rating is based primarily on the request by EPA for additional information pertaining to a variety of potential environmental effects and avoidance, minimization and mitigation efforts. EPA also wishes to convey our encouragement of the redevelopment of previously disturbed areas when feasible.

We appreciate the opportunity to review and comment on the Draft EIS for the Next NGA West Facility. Thank you in advance for your consideration of our recommendations to reduce environmental impacts of the project and to improve the quality of the document. If you have questions regarding these



Printed on Recycled Paper

comments, the staff contact for this project is Amber Tilley; she can be reached at 913-551-7565 or tucker.amber@epa.gov. For questions regarding comments pertaining specifically to the St. Clair County Site, please contact Jennifer Blonn, of our Chicago office, at 312-886-6394 or blonn.jennifer@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Hague". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Hague

Detailed Comments for Next NGA West Facility Alternatives

In order to properly compare project alternatives, environmental evaluation and mitigation requirements must be presented at similar stages. Below are categories of environmental concerns, the additional mitigation information required to compare alternatives, and associated recommendations.

The following comments are applicable to **all four of the action alternatives** unless otherwise specified:

Characterization and Level of Analysis for Pre-Acquisition Activities

The characterization of site contamination and remediation does not appear to receive the same treatment or level of analysis as other assumed pre-acquisition activities, such as National Historic Preservation Act Section 106 and Environmental Justice compliance and mitigation. The existing contamination impacts identified in the Section 4.6 Hazardous Materials and Solid Waste states that “[p]rior to the federal government taking title to the property, remediation would have to comply with the Missouri Department of Natural Resources Brownfields/Voluntary Cleanup Program standards. The current property owner would apply to the BVCP and obtain a ‘Certificate of Completion’ issued by MoDNR.” The DEIS is not clear as to why NGA does not view Phase II investigation, Site Characterization/Remediation Planning, Voluntary Cleanup Program enrollment/negotiation, or actual remediation activities as pre-acquisition actions requiring additional levels of analysis and discussion, similar to those related to NHPA Section 106 and EJ. Without further discussion, we are concerned that removing Voluntary Cleanup Program requirements from the NEPA analysis could affect the choice of a preferred alternative.

In a meeting with EPA Region 7 staff on July 30, 2015, the Corps conveyed that NGA would acquire sites from single property owners after contamination issues were fully remediated. If NGA will not acquire the site until remediation is finished, how might site ownership, construction and remediation costs, clean-up program requirements and/or construction delays impact the selection of a preferred alternative?

For example, if large quantities of contamination are identified at a given site and the current property owner cannot fund and/or complete remediation (and therefore not provide a clean site, as required), that particular site would be effectively removed from consideration. The DEIS is unclear if time delays may also be a factor in alternative selection. For instance, if one site requires extensive remediation that would delay the anticipated acquisition and construction schedule significantly, whereas a different site selection may afford NGA the ability to design and construct immediately upon the issuance of the Record of Decision, how might that affect the site selection? Likewise, if a Memorandum of Agreement or Programmatic Agreement cannot be reached for the St. Louis City site, how might this impact site selection?

Regarding site preparation, what constitutes a “clean site” under NGA regulations is unclear. While it is understood that the current property owner will be responsible for cleanup and remediation activities prior to the federal government acquiring the property, the DEIS is not clear who will be the responsible entity for site demolition or utility upgrades, since NGA has unique acquisition requirements. Will these development considerations be completed prior to NGA acquiring the property or are they considered to

be part of construction activities and therefore the responsibility of NGA? Similarly, who will be the responsible entity for satisfying EJ requirements and will these requirements need to be met prior to NGA acquiring the site?

In the Hazardous Materials section, remediation is not characterized in the same manner as NHPA or EJ, though presumably all of these requirements would have to be satisfied prior to NGA acquiring the property. Section 5.0 Environmental Justice describes the acquisition, relocation and other mitigation efforts related to EJ at the St. Louis City site as being the responsibility of the City of St. Louis (via St. Louis Development Corporation/Land Clearance for Redevelopment Authority). Section 5.0 implies that property acquisitions and relocations will have occurred prior to NGA acquiring a consolidated site, but it is not entirely clear based on the information provided if SLDC/LCRA will be solely responsible for these efforts or if NGA will have a direct and/or indirect role. EPA commends the Corps' level of analysis regarding potential EJ effects. A similar level of discussion in the alternatives analysis of the Final Environmental Impact Statement regarding pre-acquisition contamination and remediation would be helpful in making clear how a preferred site will be selected.

Recommendations:

- The FEIS should provide supplemental information on the NGA's regulations requiring the acquisition of a "clean site" from a single property owner, as well as a clear definition of what constitutes a "clean site" under these regulations.
- Please specify who will be the responsible entity for site demolition and/or utility upgrades. Will these be included in the "pre-acquisition activities" or are they to be completed by NGA after NGA acquires the property? Similarly, we request additional information on who will be responsible for satisfying EJ measures and whether EJ elements are also considered "pre-acquisition activities".
- Please clarify why the various pre-acquisition activities have different depths of evaluation and discussion in the alternatives analysis. Consistency in the treatment of pre-acquisition activities would be beneficial in the ability to make an informed decision. If there is a specific reason(s) why these activities are characterized differently, The FEIS should explain why.

Hazardous Materials and Contamination

Phase I site assessments were completed for all sites except the St. Louis City site, which underwent a preliminary site assessment. Details of potential contamination are summarized in the DEIS. Phase II Environmental Site Assessments or Site Characterizations have not been completed for each of the four alternatives sites; the DEIS indicates that additional site assessments will be carried out at the selected alternative site. Contamination is addressed by a proposed process (identified in the Fenton Alternative) that requires remediation to the applicable state's contaminant thresholds, enrollment into the state's voluntary clean-up program, and completion of the program resulting in either a Certificate of Completion or No Further Remediation letter.

Recommendation:

- Due to the results of the Phase I investigations and the preliminary site assessment presented in Section 3.6, EPA is concerned with environmental complications that could arise from information that may be learned in a Phase II assessment. We recommend that the FEIS include additional information regarding the nature and extent of potential contamination at each alternative site. To better ensure that appropriate protective measures are included in the FEIS, we recommend that the Corps conduct a Phase II ESA for whichever alternative is selected as preferred, if site access is available, and include the results in the FEIS.

Section 4.6 Hazardous Materials and Solid Waste indicates that, whenever possible, demolition materials such as soil from grading will be used onsite. This section states that most of the material that cannot be reused onsite could be reused on other sites or recycled, and that a portion of the debris will be diverted from landfills through reuse and recycling.

Recommendation:

- EPA recommends the FEIS further quantify project goals and/or estimates of how much (percentage, tons, etc.) material may be reused on site, how much may be reused and recycled off-site, and how much may ultimately end up in the landfills. NGA should consider committing to reusing or recycling a certain amount of these materials for each site as part of the hazardous materials and solid waste mitigation efforts.

Proposed Project & Siting

Two sites, Fenton and St. Louis City, have been heavily impacted by human activity. The Mehlville and St. Clair County sites, on the contrary, have more green spaces wetlands, and habitat, and greater potential for stormwater infiltration. The St. Clair County site also contains prime farmland.

While the EIS explains that the proposed sites vary in size from 100 to 182 acres, site layouts are not provided. The DEIS is therefore unclear whether resources are being avoided to the greatest extent feasible. For example, regarding the Mehlville site, the EIS states, “[t]he forested corridor in this southern segment provides natural habitat and exists mostly outside of the construction corridor” (p. 4-119). It’s unclear how much of the forest would be taken, and whether the layout options have been explored to avoid or minimize impacts to natural resources.

Recommendations:

- The FEIS should disclose potential layouts to demonstrate that resources will be avoided or minimized to the greatest extent feasible.
- EPA strongly encourages redevelopment of previously disturbed areas when feasible.

Endangered Species

EPA acknowledges that consultation with the U.S. Fish and Wildlife regarding Section 7 mitigation is ongoing. We support the continued coordination efforts to identify any outstanding issues. As an example, if the mature forests at the Mehlville site alternative cannot be mitigated and must remain as a foraging habitat, proposed site use may be impacted.

We appreciate the measures described in Biology Coordination -1: NGA will coordinate with USFWS under Section 7 of the ESA to determine appropriate mitigation for migratory birds, and Biology Coordination-2: NGA will coordinate with USFWS under Section 7 of the ESA to determine appropriate mitigation for ESA-listed species (page 4-127).

Recommendations:

- Update the status of coordination with USFWS in the FEIS, and discuss any outstanding issues and plans to resolve those issues.
- Commit to coordinate with Illinois DNR regarding the two state-listed species (loggerhead shrike and barn owl) that the DEIS states could be impacted if the St. Clair County site is selected.

Socioeconomics

The new NGA campus has the potential to stimulate new or enhanced develop in the area.

Tax impacts described for each site alternative are presented only as they affect the City of St. Louis, and not as each alternative also affects St. Louis County or St. Clair County. For example, if the St. Clair Alternative was selected, the City of St. Louis would lose earnings tax, but the State of Illinois, and applicable Illinois city/county would receive a tax benefit that is not currently calculated.

In Section 4.1, Page 4-3, Line 2 there is reference to the number of personnel living outside St. Louis City limits. This information is used to calculate earnings tax effects; however, the data is not substantiated.

Recommendations:

- EPA recommends that the potential for new or enhanced development that could result from implementation of the proposed project be evaluated in the FEIS as an indirect impact. This analysis should include any socioeconomic benefits to local communities related to the construction, operation, and maintenance of the project. This information is relevant to analyzing indirect and cumulative impacts (i.e., impacts to floodplains, wetlands, and sensitive terrestrial areas) from development potentially induced by the availability of this service.
- The socioeconomic impact should also include tax impacts for the locations that would be gaining tax benefits.

- The FEIS should provide additional clarification and analysis where appropriate, on the issues outlined above.

Waters of the U.S.

Section 3.10 Water Resources indicates that the Mehlville and St. Clair County sites contain waters expected to qualify as waters of the U.S. that would be subject to Section 404 of the Clean Water Act. This section states that a preliminary jurisdictional determination will be obtained for all waterbodies within these sites, but the DEIS is unclear at what point these PJD's will be applied for.

Consideration of CWA requirements during the NEPA process improves efficiency, promotes consistency, and helps to avoid future environmental challenges. While the DEIS documents WUS on the Mehlville and St. Clair County sites, it does not discuss the CWA Section 404(b)(1) process, including the requirement to select the Least Environmental Damaging Practicable Alternative. Consideration of the alternatives that could potentially be the LEDPA and comply with CWA permitting requirements should inform selection of the preferred alternative.

Our comments on WUS are based on information provided to date, and we look forward to further commenting on this project through the CWA Section 404 process if an alternative requiring a 404 permit is pursued.

Recommendations:

- In order to perform a more useful comparison of potential impacts to WUS among the alternative sites, EPA recommends that an application for PJD for each site be submitted to the Corps Regulatory Branch prior to the issuance of the FEIS and the results be included in the FEIS.
- If the Mehlville or St. Clair County site is selected, align NEPA and CWA Section 404 processes to ensure that the proposed project, alternatives, and impacts in the EIS will be consistent with those in the applicant's future CWA Section 404 permit application. To demonstrate consistency, summarize or include a copy of the draft CWA Section 404(b)(1) analysis as an appendix to the FEIS.
- Discuss any proposed mitigation, including mitigation sequencing of avoidance, then minimization, then compensation per the CWA Section 404(b)(1) guidelines, and describe of how mitigation will comply with the 2008 Mitigation Rule (40 CFR 230).
- If a mitigation bank will be used, identify the name and location of the bank and the status of available credits.

Air

Emissions from material hauling should be included in the air quality analysis. Given the nonattainment status of the project sites and the importance of reducing air pollutants, including greenhouse gas

emissions, we recommend that the Corps and NGA commit to require construction contractors to use cleaner diesel strategies.

In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Diesel exhaust can also lead to other serious health conditions and can worsen heart and lung disease.

Section 2.5 Description of Alternatives Carried Forward for Analysis states that diesel-fueled generators capable of supplying 100 percent of the site's power needs would be used primarily as a backup source of electricity, although NGA may enter into an agreement with the utility provider to run the generator on standby on days when energy needs are greatest.

Recommendations:

- Discuss in the FEIS localized impacts to health from air emissions during project construction, including truck traffic and use of heavy machinery. Ensure the analysis considers vulnerable populations, such as low income residents, children, and the elderly.
- We recommend that the FEIS include commitments to implement anti-idling policies and other measures from the enclosed Diesel Emissions Reduction Checklist.
- Ensure air quality impacts from diesel-generators are evaluated in the FEIS, and include consideration of local health impacts from diesel exhaust combined with existing air quality challenges.
- If diesel generators are to be used, consider filters and other best practices to control emissions.
- Consider natural gas or renewable energy alternatives to diesel generators. Evaluate the emissions, costs, reliability, and other factors of using Diesel, natural gas, and renewable energy alternatives for backup electrical power.

Climate Change and Greenhouse Gases

As mentioned in Section 3.13 Air Quality and Climate Change on page 3-148 of the DEIS, on December 18, 2014 CEQ released revised draft guidance for public comment that describes how Federal departments and agencies should consider the effects of GHG emissions and climate change in their NEPA reviews. The revised guidance supersedes the draft GHG and climate change guidance released by CEQ in February 2010 and explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action.

Recommendation:

- EPA recommends that the Corps identify opportunities to minimize GHG emissions associated with construction and operation of the facility to the extent feasible. For example, clean energy options, such as energy efficiency and renewable energy, can be considered in the design of the facilities and the purchase of maintenance equipment, new equipment and vehicles.

The DEIS does not appear to assess impacts from changing climate conditions on the proposed project. The National Climate Assessment provides an in-depth look at climate change impacts on the U.S. now and in the future. The report was produced by a team of over 300 experts guided by a 60-member Federal Advisory Committee and was extensively reviewed by the public and experts, including federal agencies and a panel of the National Academy of Sciences. The report finds that in the Midwest extreme heat, heavy downpours, and flooding will affect infrastructure, health, air and water quality, and more.¹ The National Climate Assessment section on the Midwest provides a useful starting place for examining climate change impacts in the project area.

Recommendation:

- Consider resiliency and adaptation to changing climate conditions when making decisions about infrastructure location and design, especially storm water management techniques and capacity. The FEIS should describe and analyze resiliency and adaptation measures considered and commitments made. We recommend reviewing climate predictions for the Midwest in the U.S. Global Change Research Program's National Climate Assessment report.

Green Infrastructure

The following summarizes highlights of Executive Order 13693 Planning for Federal Sustainability in the next Decade:

EO 13693 outlines a combination of more efficient Federal operations to reduce agency direct GHG emissions while fostering innovation, reducing spending and strengthening the communities in which Federal facilities operate. Agencies shall increase efficiency and improve their environmental performance. Improved environmental performance will help protect our planet for future generations and save taxpayer dollars through avoided energy and increased efficiency, while also making Federal facilities more resilient. To improve environmental performance and Federal sustainability, priority is placed on reducing energy use and cost, then on finding renewable or alternative energy solutions. Pursuing clean sources of energy will improve energy and water security, while ensuring that Federal facilities will continue to meet mission requirements and lead by example. Employing this strategy for the next decade calls for expanded and updated Federal environmental performance goals with a clear overarching objective of reducing GHG emissions across Federal operations.

¹ U.S. Global Change Research Program, 2014 National Climate Assessment, available at: <http://nca2014.globalchange.gov/report>

Recommendations:

- We encourage NGA to commit to creating a sustainable building implementation plan for the site of the Next NGA West facility. The FEIS should discuss to what extent the Corps, NGA and/or USAF would require energy efficiency measures, GHG reductions, and other sustainability measures, per EO 13693. Such a plan could incorporate the use of recycled materials, natural light, passive solar heating and/or geothermal heating, energy efficient lighting, water conserving plumbing, innovative stormwater management, on-site renewable electrical generation using solar and/or wind turbine technologies, and Energy Star equipment.
- Any locations on the chosen site that are not planned for operations should be considered for conversion to native habitats, increasing the acreage that can be beneficially used for infiltration or stormwater retention, and aesthetics, among other functions.
- Any roads, parking lots, sidewalks and other surfaces to be used for vehicles or foot traffic should be constructed using permeable pavement to reduce runoff.
- The FEIS should include additional information on the sources of the required construction materials. The use of second-sourced material (i.e., reclaimed aggregate) is encouraged. We recommend that any auxiliary buildings, new roads and other non-safety related structures be constructed with recycled or reclaimed materials wherever possible. Please see our website, <http://www2.epa.gov/greenerproducts>, for additional information regarding environmentally responsible purchasing.
- EPA recommends staggering construction schedules of the new facilities whenever possible so that no additional undisturbed land becomes permanently disturbed. This could include having one temporary laydown area (utilizing an area that is ultimately slated for a permanent use) serving the construction of new permanent facilities.
- The DEIS indicates that a separate NEPA document will be prepared to evaluate options for the future disposition or reuse of the existing NGA facility in St. Louis. That EIS should evaluate opportunities for applying green building and demolition techniques for the reuse and/or redevelopment of that existing site.

Sustainability

Page 4-82 of the DEIS explains that the DoD Energy Policy (Directive 4180.01) addresses energy efficiency and renewable energy, and DoD provides funding for new DoD properties to achieve LEED Silver, and also authorizes LEED Gold or Platinum certification or Green Globes certifications. We recognize the new NGA facility as an opportunity to implement best practices, and we appreciate Utilities BMP-3, which states, “NGA will incorporate DoD energy policies and LEED or Green Globes building goals” (page 4-91)

Recommendations:

- Discuss the feasibility of obtaining a high level of LEED or Green Globes certification for the proposed project, and provide more details in the FEIS on green building plans.
- Assess the feasibility of siting renewable energy production at the new facility, and consider committing in the FEIS to pursue renewable energy.
- In the FEIS, consider including a high-level assessment of the solar power potential at each site using available screening tools in order to inform the selection of the preferred alternative.

Transportation

Regarding transportation aspects of the proposed action, we offer the following recommendations:

Recommendations:

- For each alternative site location, describe current and planned transit service to connect employees with the new NGA West campus. Consider design elements to encourage transit use, such as strategic placement of campus entrances.
- Within the 100+ acre campus, if buildings will be spread out and staff will need to access different areas, consider designing for bike and shuttle accessibility. This would lower air emissions, and facilitating biking would promote health. Priority parking for carpooling commuters should also be considered.
- Prior to construction, require a construction traffic management plan to ensure that trucks hauling materials and heavy machinery avoid areas with sensitive receptors to the greatest extent possible. For example, truck routes should avoid schools, day care centers, and parks when possible. Crossing guards should be used when such areas cannot be avoided.

Environmental Justice

EPA commends the Corps for their use of EJSCREEN in their analysis of potential effects to EJ communities in their alternatives analysis. We appreciate your early coordination with the EPA Region 7 EJ program and would again like to reiterate that EPA supports and encourages redevelopment of previously disturbed areas when feasible and as such, acknowledges the Corps' inclusion of sites of this character in their alternatives analysis.

The narrative included in Section 5.0 Environmental Justice states that the City of St. Louis amended their 2009 Northside Redevelopment Plan to specifically address the redevelopment areas associated

with the St. Louis City site and that the City is actively pursuing relocation agreements with the remaining property owners and tenants in accordance with Missouri relocation statutes. The St. Louis Development Corporation's Land Clearance Redevelopment Authority has been working to actively acquire and consolidate property for the location of the Next NGA West Campus.

Section 5.2 Public Outreach and Minority and Low-Income Populations mentions that during the public outreach meetings for the St. Louis City site, concerns regarding lack of local jobs produced by the proposed action and the displacement of residents. The City of St. Louis is actively engaged in additional partnerships and programs, including the Strong cities, Strong communities Initiative, the Department of Housing and Urban Development Choice Neighborhood Planning Grant and the Urban Promise, to support and attempt to maintain a sense of community cohesion. EPA commends these efforts to address the community's concerns and encourages innovation in addressing and mitigating the EJ issues related to federal actions.

The DEIS is unclear as to whether any federal funding from the Corps and/or NGA will be provided to support the mitigation and relocation efforts, or if the City of St. Louis/SLDC/LCRA is the entity solely responsible for these costs and efforts at the St. Louis City site. It is understood that the NGA must acquire the property from a single property owner, presumably the City of St. Louis in this instance, and that by the time of acquisition, all properties within the project area will have been acquired and the residents relocated.

Recommendations:

- The FEIS should specify who will be the responsible entity for carrying out the avoidance, minimization and mitigation actions, including relocation efforts, which are outlined in the DEIS.
- While we appreciate the explanation of revitalization efforts in the vicinity (e.g., SC2; Choice Planning Grant to develop Near Northside Transformation Plan; Urban Promise Zone), it's unclear how these plans align with the potential location of the NGA facility at the St. Louis City Site. Please explain whether siting the facility at the St. Louis Site is in line with these other efforts.
- Additionally, EPA would like to request clarification on the statistical figures presented in paragraph 2 of Section 5.1.1.3 St. Louis City Site on page 5-8. This section states that "approximately 70 percent of the lots are vacant residential lots..., 8 percent are vacant structures, and the remaining 12 percent are occupied by residential, institutional, utility, commercial, and industrial uses..." These figures add up to only 90%. We recommend clarification on the current land use statistics of the St. Louis City site.

We recognize local community development goals and the potential for the NGA St. Louis City site to have a stabilizing effect on communities facing great challenges. While the EIS lays out several potential impacts, the effects of the fence/wall surrounding the campus on community cohesion, neighborhood character, nearby development potential, EJ, and overall quality of life are not described, nor are measures to minimize such impacts. The DEIS is also unclear whether a fence or a wall would

be used since Section 2.5 Description of Alternatives Carried Forward for Analysis and Section 4.9 Visual Resources/Aesthetics reference a fence and Table 5-8 on page 5-23 of Section 5.3 Identification of Disproportionately High and Adverse Effects on Minority and Low-Income Populations mentions a perimeter wall.

Recommendations:

- Describe and include pictures or drawings of the proposed fence/wall. Include descriptions of ingress and egress facilities.
- If the fence/wall would be included in a neighborhood setting, commit to context sensitive and aesthetically pleasing design, prepared in partnership with the community, so that the fence/wall is least burdensome to neighbors.
- Describe how the proposed campus would interact with the surrounding St Louis Place and Carr Square neighborhoods. For example, would there be a cafeteria within the fenced/walled in area, or would employees seek dining options within the neighborhood? Would nearby residents have access to any campus facilities?
- To mitigate for any potential EJ impacts from displacement/relocation and the creation of barrier (i.e. 100+ acre fenced/walled off area), commit to specific best practices and mitigation measures. Consider a local job training and employment program for construction jobs as well as long term job opportunities at the NGA complex, neighborhood beautification projects, context sensitive design, and educational NGA outreach to local schools.

Historic Preservation

Information presented in the DEIS does not establish National Historic Preservation Act Section 106 requirements or conclusions. We acknowledge that the St. Louis City site and St. Clair County site alternatives are still being evaluated by the applicable State Historic Preservation Officer regarding mitigation. Required mitigation could raise additional challenges to each proposed alternative's site layout and/or design planning. Specifically, at the St. Louis City site alternative, the DEIS identifies many listed or eligible properties that NGA plans to demolish. As discussed previously, if an agreement involving demolition cannot be reached with the Missouri SHPO, alternative mitigation may impact proposed site design or use.

Recommendation:

- Continue coordination and negotiations with Missouri SHPO, Illinois SHPO and the Advisory Council on Historic Preservation (as necessary) in order to develop a programmatic agreement or Memorandum of Understanding. This agreement or MOU should be completed prior to and

incorporated in FEIS analysis. EPA requests a copy of the draft programmatic agreement or MOU when it becomes available.

ENCLOSURE

U.S. Environmental Protection Agency Diesel Emission Reduction Checklist

- Use low-sulfur diesel fuel (15 ppm sulfur maximum) in construction vehicles and equipment.
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Use enclosed, climate-controlled cabs pressurized and equipped with high efficiency particulate air filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Regularly maintain diesel engines, which is essential to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance. For example, blue/black smoke indicates that an engine requires servicing or tuning.
- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Repower older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards. Purchase new vehicles that are equipped with the most advanced emission control systems available.
- Use electric starting aids such as block heaters with older vehicles to warm the engine to reduce diesel emissions.

- Per Executive Order 13045 on Children's Health², EPA recommends operators and workers' pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, and playgrounds. Diesel emission reduction measures should be strictly implemented near these locations in order to be protective of children's health.

² Children may be more highly exposed to contaminants because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and their growing organs are more easily harmed.